



Atmospheric Turbulence Processes and Wildland Fires

Guest Editor:

Dr. Warren E. Heilman

USDA Forest Service, Lansing, MI,
USA

Deadline for manuscript
submissions:

closed (10 November 2020)

Message from the Guest Editor

Dear Colleagues,

Accurately predicting wildland fire behavior and the dispersion of smoke from wildland fires are two important issues that confront fire- and air-quality managers in their efforts to minimize the potential adverse impacts of wildland fires.

The purpose of this Special Issue is to highlight recent research on atmospheric turbulence regimes and processes in wildland fire environments through theoretical investigations, field measurements, and/or numerical modeling. Manuscripts addressing any aspect of atmospheric turbulence as it relates to wildland fires are welcome, including but not limited to the following:

- * The effects of complex terrain and forest vegetation on fire-induced turbulence;
- * Turbulence effects on smoke-plume dynamics;
- * Correlations of fire behavior with the spatial and temporal variability of turbulence in the fire environment;
- * Recent advances in turbulence parameterizations for operational fire behavior and smoke dispersion systems;
- * Turbulent heat and momentum flux variability in the fire environment;

Dr. Warren E. Heilman
Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences
and Climate (ISAC), National
Research Council (CNR), Str. Prv.
Lecce-Monteroni km 1.2, 73100
Lecce, Italy

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank: CiteScore - Q2 (Environmental Science (miscellaneous))

Contact Us

Atmosphere Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/atmosphere
atmosphere@mdpi.com
[X@Atmosphere_MDPI](https://twitter.com/Atmosphere_MDPI)